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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/544,268

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John Gordon

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DES MOINES, IA 50309-2721

EXAMINER

MUROMOTO JR, ROBERT H

ART UNIT

PAPER NUMBER

3765

NOTIFICATION DATE

DELIVERY MODE

03/04/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patatty@ipmvs.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/544,268	<b>Applicant(s)</b> GORDON ET AL.	
	<b>Examiner</b> BOBBY H. MUROMOTO JR	<b>Art Unit</b> 3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 25-33, 37, 39-48 and 50-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-33, 37, 39-48, 50-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 25-33, 37, 39-48, 50-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

All independent claims recite more than one "outer layer", causing confusion with all intervening claims with limitations drawn to 'outer layer'.

Claim 51 recites "the opposing face" with no antecedent basis.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25-33, 37, 39-48, 50-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over '158.

'158 discloses an insulating material for use in diver's suits (wet or dry).

'158 discloses a material with many lamina that are then laminated to each other as claimed.

'158 discloses, "**The layer 26 closest to the wearer's skin is disclosed as being made from knitted nylon (synthetic), cotton, wool or blends or sublayers thereof, ( as claimed).**"

'This layer 26 serves primarily **to absorb perspiration from the diver's body in the case of a so-called "dry suit" where wrists, ankles and neck openings seal with the skin of the diver** or in the case of a two-piece "dry suit". It also permits easy donning and doffing of the garment. In the case of a "wet suit" **this layer 26 would function to minimize the extent of convective heat loss to water moving around between the diver's skin and his diving suit** (col. 5, lines 44-54).'

Suit in figures covers all areas recited in claims.

The layer 26 covers the entire suit inherently providing the limitations in claims 30-32 and corresponding limitations in new claims.

Layer 20 is "neoprene rubber (commonly used in the past in diver's suits in the form of a closed-cell foam)" and is the first outer layer as claimed.

Additional layer 24 are provided outside of the outer layer as newly claimed.

The layer 26 is clearly separate from outer layer 20 that is then attached together (laminated together). The 'worn as...' limitation does not limit the suit. And the suit is worn as 'a separate layer with the outer layer placed thereover with attachment means provided.' This limitation is also a product-by-process limitation. Once the examiner shows that the reference product is similar to the claimed product the burden shifts to the applicant to show a material difference between the prior art and claimed invention.

As shown in figures once layer 26 attached or laminated to the other layers it does form an 'integral' material as claimed.

'158 discloses that the layer 26 is a knitted two way stretch fabric made from nylon (inherently elastic to some extent) or blends including among other materials wool and nylon. The knitted structure and the use of nylon in the blend would at least partially impart some measure of "elasticity" to the wool blend.

With respect to claim 43 and newly added corresponding claims, the suit is disclosed as being functional as a wetsuit and inherently provides means for the suit to permit flow of water as claimed. Additionally, the elastic nature of the reference material would inherently provide wrist and ankle seams that would function as recited control means. The specification recites these control means as smooth skin seals at the ankles and wrists.

Newly added 'substantially closed cell compressible' material is clearly disclosed by citation above reciting neoprene rubber as commonly used closed cell foam.

Newly added basis weight limitations and functional limitations regarding the 'retention' of liquid to 'form a substantially non-compressible, thermal barrier' are also considered to be taught by the instant reference.

With regards to recited weight, thickness and yarn size properties and functional limitations the MPEP is clear:

#### **Changes in Size/Proportion**

*In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955) (Claims directed to a lumber package "of appreciable size and weight requiring handling by a lift truck" where held unpatentable over prior art lumber packages which could be lifted by hand because limitations relating to the size of the package were not sufficient to patentably

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distinguish over the prior art.); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976) ("mere scaling up of a prior art process capable of being scaled up, if such were the case, would not establish patentability in a claim to an old process so scaled." 531 F.2d at 1053, 189 USPQ at 148.).

In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative **dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.**

“PRODUCT AND APPARATUS CLAIMS - WHEN THE STRUCTURE RECITED IN THE REFERENCE IS SUBSTANTIALLY IDENTICAL TO THAT OF THE CLAIMS, **CLAIMED PROPERTIES OR FUNCTIONS ARE PRESUMED TO BE INHERENT**

Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, **a prima facie case of either anticipation or obviousness** has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, **the applicant has the burden of showing that they are not** (MPEP 2112.01)."

In view of the fact that all structural limitations of the claims are disclosed, the burden is shifted to the applicant to show non-obvious material differences between the reference and the prior art and to prove that the reference material does not provide the recited basis weight and functional limitations with regard to liquid retention and barrier layer formation. Recently submitted remarks and affidavit have been considered but

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are not persuasive. Wool is inherently and widely, well known to have hydrophilic nature and inherently provides thermal insulation. Use of Wool to provide a thermal insulation barrier is not an unexpected result as wool is known to hold water and inherently would provide added thermal insulation as this is the known and recited insulation technique used in wetsuits.

Although essentially all of the limitations of the claimed invention are disclosed above, '158 does not teach the use of merino wool, fabric weight, fabric thickness, fiber size or the specific percentage for blending of the synthetic and wool material.

With respect to the recited size/weight/dimensions, as previously cited above, absent any criticality or showing of unexpected results arising from the specific blend range, one of ordinary skill in the art could through routine engineering design choice determine the exact blend percentage for a desired end use application of the dive suit material, as the MPEP states such limitations are not patentably distinct limitations.

As for the use of merino wool, it is a well-known and widely used practice to use merino wool instead of standard wool. Merino wool is recognized as a higher grade of wool, having increased softness and comfort against the skin (see Non Patent Literature cited on PTO-892) and has been in use for hundreds of years in all type of garments that require warmth and comfort.

Therefore it would have been an obvious variant to modify the '158 wool or wool blended layer to use merino wool as merino wool is recognized as a higher grade of wool, having increased softness and comfort against the skin (see Non Patent Literature

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cited on PTO-892) and has been in use for hundreds of years in all type of garments that require warmth and comfort.

New claim 51 recites only product by process limitations, “knitted with a coarser weave”, the MPEP is clear:

“The lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. **We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different that a product claimed in a product-by-process claim, a rejection based on either section 102 or section 103 of the statute is eminently fair and acceptable.** As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith.” *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972).

The burden is shifted to applicant to show a materially different resulting product from the claimed processing steps.

### ***Response to Arguments***

Applicant should submit an argument under the heading “Remarks” pointing out disagreements with the examiner’s contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them.



Since none are submitted not response is needed.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BOBBY H. MUROMOTO JR whose telephone number is (571)272-4991. The examiner can normally be reached on 8-530, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert H Muromoto, Jr./  
Primary Examiner, Art Unit 3765